TOBACCO INDUSTRY RESEARCH COMMITTEE #134RR1
150 EAST FORTY SECOND STREET NEW YORK 17, N.Y.

Activated Mar. 1, 1957.
Funds paid Mar. 21, 1957
to cover Travel etc.

RENEWAL
Application For Research Grant

Date: November 22, 1957

1. Name of Investigator: C. M. Pomerat, Ph.D.

2. Title: Professor of Cytology, Department of Anatomy
Director, Tissue Culture Laboratory

3. Institution & Address: The University of Texas - Medical Branch
Galveston, Texas

4. Project or Subject: Tissue culture studies of human lung.

5. Detailed Plan of Procedure (Use reverse side if additional space is needed):

a. We have been successful in cultivating human fetal lung and lung tissue from experimental animals.

b. Cultures of pulmonary tissue are being subjected to chronic treatment with low concentrations of tobacco condensates. Some inroads are being made in similar studies in which smog and its constituents are used (ozone and unsaturated hydrocarbons as suggested by the work of Haagen-Smit of the California Institute of Technology).

c. As end points regarding the effect of test chemicals on the cells, chromosome counts and records of injury to mitochondria are being made in addition to observations on growth patterns, "strain" induction and the ultimate survival of the cultures.

d. While much information has been accumulated since Dr. Yuh Nakanishi became attached to the project in March 1957, manuscripts have not been prepared since the collection of data for statistically reliable reports is still in progress.

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6. Budget Plan:

Salaries - Yuh H. Nakanishi	$ 5,132*
Expendable Supplies	1,000
Permanent Equipment	- -
Overhead	638
Other Travel to meetings	250
Total	7,020
For new assistant	5000
Total	12,020 00

* OASI $94.50 - WCI $37.50

7. Anticipated Duration of Work: One year.

8. Facilities and Staff Available:

The tissue culture laboratory has facilities for 1200 roller tube cultures and equipment for large quantities of Rose chamber and cell strain (bottle) cultures. Six cine time-lapse, phase units are available and two still photomicrographic setups.
The professional group includes five investigators with doctor's degrees and eight technical assistants exclusively concerned with research projects.

9. Additional Requirements:

The work would be greatly hastened if we could add an assistant for chromosome counting. Dr. Nakanishi is certain that an ideal person for this could be obtained from Dr. Makino's group at Hokkaido University in Japan. This would require an additional $5000.00

10. Additional Information (Including relation of work to other projects and other sources of supply):

We hope to examine the excellent fractionated preparations of tobacco tars which have been made by Mr. Jack Neal of the Department of Public Health and Preventive Medicine of this School.

It is hoped that our program may encompass studies on the smog problem so that valid comparisons may be made between this and the tobacco factor in relation to the activity of human pulmonary cells in vitro. It has been possible to prove in provisional work that lesions are produced in mitochondria both by smoke condensate and by ozone. The Smog Committee of the Los Angeles County Medical Society and Professor A. J. Haagen-Smit of California Institute of Technology have helped us with pilot studies. It is possible that additional funds may become available from a California group for this phase of the investigation.

Signature of Director of Project: /s/ C. M. Pomerat

/s/ E. D. Walker
Business Officer of the Institution

Source: University of California, San Francisco Tobacco Control Archives, http://www.library.ucsf.edu/tobacco